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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,887	02/11/2004	Colin Temple	HES 2003-IP-009967U1P1	3325
28857	7590	04/15/2010	EXAMINER	
CRAIG W. RODDY HALLIBURTON ENERGY SERVICES P.O. BOX 1431 DUNCAN, OK 73536-0440			FIGUEROA, JOHN J	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			04/15/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

craig.rodgy@halliburton.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/776,887	<b>Applicant(s)</b> TEMPLE ET AL.	
	<b>Examiner</b> JOHN J. FIGUEROA	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3, 11-19, 21-23, 25, 27, 28, 30, 32-36, 39-41, 44, 86-89, 92 and 93 is/are allowed.
- 6) ☒ Claim(s) 56, 59-62, 65-73, 82, 83, 85, 95, 98-100 and 103-112 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/1/2010</u> .                                                | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Disposition of Claims: Claims pending in the application are 3, 11-19, 21-23, 25, 27, 28, 30, 32-36, 39-41, 44, 56, 59-62, 65-73, 82, 83, 85-89, 92, 93, 95, 98-100 and 103-112.

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. Receipt is acknowledged of a request for continued examination ('RCE') under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e) and a submission (amendment), filed on April 1, 2010. This request has been deemed proper and this application has been hereby examined in view of said amendment.

### ***Response to Amendment***

2. The 35 U.S.C. 102(e) rejection of claims 56, 62, 65-73, 82 and 83 as anticipated by USPN 7,276,249 B2 to Ryde et al. (hereinafter 'Ryde') has been maintained for reasons previously made of record in items 2 and 6 on pages 2 and 3, respectively, of the Final Office Action dated January 5, 2010 (hereinafter 'FOA'). **This rejection has been extended to include new claim 112** in view of this new claim not reciting any limitation not previously addressed in this rejection in a prior action.

3. The 35 U.S.C. 103(a) rejection of claims 56, 62, 65-73, 82, 83, 95, 100 and 103-111 as unpatentable over USPN 4,792,412 to Heilweil, II et al. ( hereinafter 'Heilweil'412') in view of either USPN 3,252,904 to Carpenter (hereinafter 'Carpenter') or U.S. Patent Application Publication No. 2004/0106525 A1 to Willberg et al. (hereinafter 'Willberg') has been maintained for reasons previously made of record in items 3 and 7 on pages 2 and 5, respectively, of FOA. This rejection as to method claims 1, 3, 7, 8, 10-19, 24, 25, 27, 28, 30, 32, 36, 39-42, 86, 92 and 93 has been

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withdrawn in view of Applicant's amendment to these method claims in the response to FOA filed with RCE (hereinafter 'Response') limiting, *inter alia*, the formation to comprise shale and the drilling/treatment fluid inhibiting shale. However, **the instant rejection has been extended to include new claim 112** for the same reasons mentioned above in paragraph #2.

4. The 35 U.S.C. 103(a) rejection of claims 56, 59-62, 65-73, 85, 98, 99, 107 and 110 as unpatentable over Heilweil'412' in view of Carpenter or Willberg, and further in view of Stowe, has been maintained for reasons previously made of record in item 4 on page 2 of FOA. This rejection has been withdrawn as to method claims 4-6, 14, 21-23, 33-35, 40, 87-89 and 93. **However, this rejection has been extended to include new claim 112** for the same reasons mentioned above in paragraph #2.

#### ***Allowable Subject Matter***

5. Claims 3, 11-19, 21-23, 25, 27, 28, 30, 32-36, 39-41, 44, 86-89, 92 and 93 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or suggest a method of drilling/treating a subterranean formation comprising drilling/treatment the formation using a fluid that contains, *inter alia*, PVP nanoparticles having an average particle size of less than 1,000 nm; wherein said formation comprises shale; and wherein said drilling/treatment fluid partially inhibits the degradation of shale.

### ***Response to Arguments***

#### **The 35 U.S.C. 102 Rejection over Ryde (items 2 and 6 of FOA)**

7. Applicant's arguments filed regarding the 35 U.S.C. 102(e) rejection of claims 56, 62, 65-73, 82 and 83 as anticipated by Ryde have been fully considered but deemed unpersuasive. Examiner notes that these rejected claims are drawn to a fluid composition.

In response to Applicant's arguments that the composition in Ryde is a pharmaceutical composition whereas the presently claimed fluid is for use in an oil field application, this is a future intended use of the claimed composition and its components. If the prior art composition is capable of performing the intended use, then it meets the claim.

Thus, the presently rejected claims, as amended, remain anticipated by Ryde.

#### **The 35 U.S.C. 103 Rejections over Heilweil'412 in view Carpenter, Willberg and/or Snow (items 3, 4, 7 and 8 of FOA)**

8. Applicant's arguments filed in Response traversing the captioned 35 U.S.C. 103 rejection as to the method claims have been fully considered and deemed persuasive in that the method claims have been currently amended to limit, *inter alia*, the formation to comprise shale and the drilling/treatment fluid inhibiting shale.

However, this rejection has been maintained as to the composition claims (i.e., claims 56, 59-62, 65-73, 82, 83, 85, 95, 98-100 and 103-112) for the same reasons

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previously made of record in items 3, 4, 7 and 8 of FOA because no new chemical/structural limitation has been added to these composition claims in Response to patentably distinguish it from the prior art, except for intended use limitations. As discussed above in the instant action as to intended future use limitations, if the prior art composition is capable of performing the intended use, then it meets the claim.

Thus, claims 56, 59-62, 65-73, 82, 83, 85, 95, 98-100 and 103-112, as amended, remain unpatentable over Heilweil'412, Stowe and either Carpenter and/or Willberg.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN J. FIGUEROA whose telephone number is (571)272-8916. The examiner can normally be reached on Monday-Thursday 8:00-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John J. Figueroa/

Examiner, Art Unit 1796

JJF/JJS